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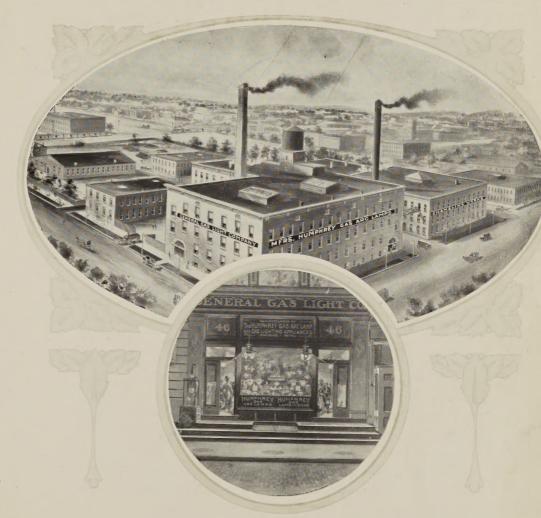
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AVERY LIPPARY

GENERAL GAS LIGHT CO.



MANUFACTURERS OF

THE HUMPHREY GAS ARC LAMP. KALAMAZOO, MICH. U.S.A.

New York, 46 W. Broadway London England, 15 Gt. James St. San Francisco, 519 Eddy St. Bremen, Germany. 12 Kaiser St.

FIVE years ago this company produced the first Gas Arc Lamps. Today the same lamps are giving as efficient service as when first installed. During most of this time we have had our manufacturing facilities taxed to the limit to keep pace with the demands upon us. Our plant has been repeatedly enlarged, and our types of lamps have been varied along conservative lines.

In producing new designs we have endeavored to create something that will supplement and round out a gas company's lighting facilities rather than supercede former productions of proven merit. It is not our aim to make lamps that will merely cater to momentary fancies as regards style and shape. We believe that the best interests of the gas business are conserved by fewer lamps of standard construction, and work to this end.

While it is probably impossible to make a better lamp than our standard original indoor design, we realize that some variety is desirable, and we believe that the new types shown herein will supply this demand without complicating unduly the stock-keeping account of our customers.

Inquiry is frequently made regarding the production of an Inverted Arc along the well known lines of Humphrey excellence, and in response we are pleased to be able to announce that two years of unremitting experimental work finds us with that problem solved, and we believe along such practical lines as will give gas companies enormous advantage in certain fields of lighting, and while we hoped to be able to show this form of lamp in this catalogue, we have at last determined not to do so until prepared to put them on the market commercially. Our money is and has been spent freely in this work and we are inclined to think that others who are rushing incomplete and hastily assembled lamps on the market are experimenting at the expense of the trade.

All Humphrey Lamps will continue to bear our unconditional guarantee of mechanical and illuminating superiority.

General Gas Light Co.



PROGRESS

TO those who have actively engaged in the gas business during recent years it is needless to say much by way of introduction to a catalogue of Humphrey Gas Arc Lamps.

Progress in gas sales, energetic and well directed management, and the Humphrey Lamp have been so closely allied that one suggests the others.

Yet in so rapidly expanding an industry as the gas business, new men must be constantly recruited, and to them we will briefly sketch the history of one of their greatest weapons against all competition in the lighting line.

When the Humphrey Gas Arc Lamp was placed on the market, it was the first practical and economical high power gas lamp ever produced. Its success was immediate, no gas appliance ever met with such extraordinary appreciation and phenomenal sale.

ELECTRICAL COMPETITION

THE field for the Humphrey Gas Arc Lamp brings it into direct competition with the Electric Arc.

In our opinion at no time could the Open Electric Arc Lamp be fairly said to be a good or even practical light for indoor purposes. It is but fair to state, however, that the "Incandescent, or Enclosed Arc," is a good light, and when pushed with energy has no difficulty in displacing in stores, etc., the ordinary gas fixtures and other forms of individual incandescent gas lights with their unclean or broken chimneys, misfit bunsens, carbonized mantles, costly maintenance, and inconvenient methods of lighting and extinguishing.

And it is with the Humphrey Gas Arc Lamp only that this competition can be successfully met. We claim superiority over the Electric Arc as follows:



MORE ACTUAL LIGHT. Greater in volume and has not the thin appearance of the electric light.

BETTER COLOR. SHADOWLESS. STEADIER. REQUIRES LESS ATTENTION.

Cost of Light to Consumer Less.

FIRST COST OF LAMPS INSTALLED TO GAS COMPANIES IS MUCH LESS. PROBABLY ABOUT HALF THE COST OF AN ELECTRIC LIGHT TO ELECTRIC COMPANIES.

The fact that we are selling thousands of these lamps to Companies having combined plants we believe substantiates our claims.

During the past five years the Humphrey Gas Arc Lamps have been in constant and direct competition with the best forms of electric lighting, and Gas Companies by their means have been able to stay the stampede to electricity and to preserve and regain their most profitable source of income.

They are to be found in use in practically every city in the United States, and in many cities in proportional numbers to the city of Chicago, which alone has 50,000 Humphrey Lamps in regular service.

They are also to be found in use in every civilized country in the world, and up-to-date Gas Companies everywhere, instead of wondering how to resist encroachments, are now the aggressive ones.

SMALL LIGHTING UNITS VS. LARGE

EVEN in the face of this wonderful record, well meaning and sincere gentlemen of more scholarly attainments than actual experience in the commercial department of the gas trade occasionally rise in the councils of their brothers and descant profoundly on the scientific superiority of small light units in commercial gas lighting. Others whose aims cannot



be urged as disinterested are busily engaged in an attempt to spread a similar propaganda. We have no quarrel with the scientific arguments of our erudite friends or the thinly veiled advertising of merchants with other wares to sell.

Small unit gas lighting conditions however are practically the same now as before the advent of the Humphrey Gas Arc Lamps. Gas men as able and ingenious as ever graced the profession then fitted single lights in all conceivable combinations, maintained them at highest efficiency regardless of expense and lost out against the ever advancing electric light. What hope of better success today? The higher power single burners have been tested and found wanting; the one mantle inverted burners for commercial purposes have all the disadvantages of the upright lamp and some objectionable peculiarities of their own. Humphrey Gas Arc Lamps, self lighting, reliable, convenient, economical and efficient fulfill the requirements of the business man.

INSTALLATION AND MAINTENANCE

GAS Companies install and maintain Humphrey Lamps in various ways. We have obtained data from nearly every Gas Company in the country, and we find that the ones who get the best results are those who retain ownership of the lamps, install them free, or on a small monthly rental, and maintain them at a cost to the consumer only sufficient to defray the actual cost of maintenance.

A special booklet containing fac-simile letters from Gas Companies, showing copies of leases, maintenance blanks, etc., will be sent any gas company on application.

But whatever system of installation any Gas Company may adopt, whether the lamps are sold outright to the



customer or are installed on a monthly rental basis, it is of the greatest importance to the gas business that each company should maintain the lights, replace broken mantles, keep the glassware clean and see that the lamps are always in working order, the same as an Electric Company does. Once this system is adopted, Gas Companies will see their Lighting Business grow most wonderfully and will always have stores which are beautifully lighted and a credit to the Gas Industry.

NEW BUSINESS

It has been repeatedly stated to us by managers of Gas Companies that they consider the earnings of a Gas Arc Lamp during a year to be fully equal to the earnings of a Gas Stove. This statement we know to be practically true, and it goes to prove what we have always maintained, that Commercial lighting is the very cream of the Gas Business.

Gas companies who have pushed the stove business the last few years fully appreciate the increased consumption which has resulted from their efforts. But much of the business was obtained at considerable outlay for mains and services which were run hundreds of yards to get a few new customers, while the great business of Lighting stores and factories in the center of the city with the mains and connections all ready, has been neglected.

MECHANICAL CONSTRUCTION

PLEASE remember that we are the largest and probably the only exclusive gas lamp house in the world. We make more lamps than all other lamp houses put together, and we manufacture our goods instead of jobbing them out to metal working institutions—a piece here and a piece there—to be made on competitive bids and in the cheapest possible



way. Every article in this catalogue except glassware and mantles is our own product. This insures uniformity of construction and interchangeability of parts, simplifying the matter of repairs at a future date.

Our factories are all equipped with the finest facilities for doing work right. Humphrey Lamps are made of the best material and will stand wear and tear. We have tried and we believe succeeded in producing the very best lamp it is possible to build.

EXPERT KNOWLEDGE

WE have studied the gas business with a view to building up the lighting end of it. The ownership of this company is represented by owners in more than forty prominent gas companies. We have tried to make such goods as in our estimation would assist the gas company to increase its sales, and are constantly placing in the hands of our customers data calculated to serve this end.

The conditions governing the variation in style of burner, size and number of gauzes and orifice of gas ways to be used, the control of the pressure and the problems generally arising from the differences in combustion of various gases are fairly well understood by most gas men. We have however made many and exhaustive experiments under all kinds of situations and when we are furnished with data covering details of manufacture and distribution as they exist in the various cities, we furnish lamps equipped to meet them. We invite and are always ready to respond to any inquiries which we may get regarding these matters and we will cheerfully send a representative where the difficulties are not readily understood and overcome.



STANDARD INDOOR LAMP

THIS is the original Gas Arc Lamp that revolutionized the commercial gas lighting business. Improvements in details of construction have been made from time to time and it is a thoroughly up-to-date lamp. The metal work is all so shielded by the glass that deteriorating effects of heat and combustion products are practically avoided. This design continues to be one of the best selling of our entire line.

We guarantee all four burner lamps to give as great or a greater amount of light and a much more satisfactory illumination than the so-called 2000 candle power electric arc, with a consumption of 16 to 18 feet of gas per hour.

These startling results are obtained without the use of chimneys. The grouping of the mantles around the central supply pipe preheats and greatly expands the gases; the peculiar construction of the burners effects proper and complete aeration of the gases, thus greatly increasing the efficiency of combustion and economy in amount of gas used.

The mantles will not carbonize or blacken when burners are clean and properly cared for.

Indoor lamps may be supplied with the one mantle night light. This was especially designed as its name implies to allow the use of but one burner as an all-night light in business houses, and the equipment of any store should include

one lamp of this style. For places where the full power of light is not required at all times, such as upper floors, stock rooms, etc., this lamp is very useful. Light from all the mantles or from only one may be had as wanted by a pull of the chain.

The small corner illustration shows lamp with one mantle in service.





FACTORY LAMP

THE Humphrey Factory Lamp is the result of a careful study of conditions in our own and many other shops. It meets a long felt want and solves the problem of economical factory illumination.

In the construction all glassware is eliminated except the globe. The Canopy, Reflector, and Globe Holder are all made of steel, coated inside and out with porcelain enamel.

Ninety per cent. of all dust and dirt accumulating about a lamp in a work shop drops from the ceiling as a result of jars from the floor above or vibration of shafting, etc. The Canopy fully protects the interior of the Factory Lamp. The bottom is closed in as much as is practical in an up-draft lamp.

The special burner construction permits all dust to pass

through to flame where it is consumed.

The lamp is extremely durable, efficient and handsome, and after long use needs only to be dusted to resume its original appearance.

In factories where jar and vibration prevail we earnestly recommend the use of our all metal Anti-Vibrator; this is shown

in cut but not included in price of lamp.

The Humphrey Factory Lamp is not a cheap piece of work but a high grade article built for its special purpose and will find its sale among careful buyers where quality and efficiency are the determining factors in a purchase.

Can be supplied with one mantle night light if wanted.





Factory Lamp

CYLINDER LAMPS

IN the Cylinder style of lamps we are able to use a more compact construction and to a great extent abandon the large ceiling plate.

Combustion efficiency is improved by the draft inducing cylinder which has been carefully proportioned to get just

the right effect.

All Humphrey Indoor Gas Arcs are instantly lighted simply by pulling the chain, and extinguished as easily. The burners are ignited by means of a small pilot jet burning but a few feet of gas a day, which in convenience and time saving, pays its cost many times over.

Humphrey Lamps will replace electric arcs, light for light, with the most satisfactory results in point of illumina-

tion and a saving in cost of 25 to 50 per cent.

For low ceilings where it is desirable to use the 16-inch ceiling plates either of opal glass or enameled steel we supply a sliding collar which fits over ordinary $\frac{3}{8}$ gas pipe and may be fastened by a set screw at any height; this forms the support for the ceiling plate holder.

Cylinder Lamps are used either with or without lower shades and with round or pear shaped globes of clear or alabaster glass. In view of the many combinations of glassware regularly supplied with these lamps, we particularly urge our customers to be specific in stating just what is wanted.

Polished nickel is the standard finish for this lamp, but wrought iron black or dead black and copper can be furnished without extra charge; oxidized copper is not a satisfactory finish on cylinders.





Nickel Cylinder Lamp

ENAMELED CYLINDER LAMPS

ALL metal finishes are more or less susceptible to heat and atmospheric conditions. Those we employ are the most enduring but in certain corroding environments they will in time be affected.

Porcelain enamel resists practically everything and in our enameled cylinder lamps the purchaser has a range of choice as to color effects and the certainty of durability.

White and gold, green and gold, blue and gold, black and gold lamps all are meeting with a constantly increasing sale despite the fact that in this catalogue they are illustrated for the first time.

When it is not especially necessary to deflect the greatest possible amount of light downwards the reflector shade can be dispensed with. Without the shade the lamp makes a very handsome appearance and on that account is preferred by many users. In such cases a pear shaped globe, (alabaster preferred) should be used as its enlarged upper part acts as a reflecting surface throwing down an appreciable amount of illumination, it also makes a more symmetrical appearance.

Large numbers of nickel lamps are also used with pear globes and without shades.





OUTDOOR LAMP

THE Humphrey Outdoor Lamp has opened practically an entirely new field of opportunity for the sale of gas. Gas Companies have not been slow to appreciate this and in the past year outdoor lighting business of all kinds has been developed amazingly. We have special literature dealing with this subject so will not enlarge upon it here, but hope that all who are interested will give us the privilege of explaining fully the great possibilities in this line.

Experience has shown that brass, copper or any other unprotected metal will not stand the action of the heat and the elements which an outdoor lamp is subject to. After much investigation we have found that certain grades of steel, when coated with a special heat resisting enamel fused to the metal in a white hot muffle, will meet the exacting conditions of outdoor gas lighting.

The lamp is lighted by a turn of a key, no chain to tempt mischief makers to light burners when not wanted. The key is detachable and may be removed entirely if found desirable.

Globe can be instantly lowered to put on new mantles by simply pressing springs in bottom, or removed to clean by pressing other similar springs. The sliding rods carrying globe support move in gas tight casing, doing away with any necessity for stuffing boxes.

Lamps are storm and bug proof.

The parabolic reflector shown in the small illustration will throw all the light in one direction and is highly to be recommended for certain classes of lighting.





THE Humphrey Residence Lamp is an artistic fixture adapted to modern conditions of incandescent gas lighting. All the objectionable features inherent in old style long arm chandeliers are eliminated. The lamp is compact, durable, convenient. The light is strong but this can be softened with fancy shades of glass, silk, or beads, so as to harmonize with any surroundings. It makes an ideal light in the parlor, sitting room or over dining or library table.

All parts are quickly removable for cleaning, same as in the large Ornamental Arc shown on page 23. The ceiling canopy is of sufficient size to be effective without being cumbersome or unsightly. A pilot light ignites all the burners at once. Consumers will find the small amount of gas required by the pilot will scarcely be noticed in the gas bill and that its use will be such a positive convenience as to be well worth many times the cost. When it is desired to have but one mantle lighted, a slight pull of the chain will extinguish other burners.

The regular finishes of brushed brass, oxidized copper, wrought iron black will match almost all the usual metal work of a home, but special finishes of any kind will be made at a small extra cost.

When not otherwise specified lamps are shipped with opal shades and 1/4 ground bowl globe as shown herewith.





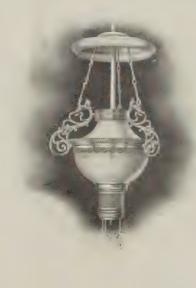
ORNAMENTAL ARC

THE extreme popularity of the regular commercial designs of Humphrey lamps has resulted in a call from exclusive stores for a different pattern of lamp, something that would not be seen in a majority of business houses.

Churches, Public Halls, Lodge Rooms, etc., have wanted a more decorative fixture; for all these, as well as high class stores, the Ornamental Arc is recommended.

Lamps are finished in brush brass, wrought iron black, or oxidized copper. Colored glassware same as shown with the Residence lamps is carried in stock and greatly enhances the attractiveness of the Ornamental Arcs.

The bracket which holds the reflector shade is hinged at the top and held in position at the bottom by a spring which needs only to be pressed to release it, thus making the removal of the shade for cleaning a very simple matter. The globe holder is held in place by a spring which permits globe to be quickly taken off. Ceiling shade or canopy is glass with the new pattern rolled rim. Each lamp has the one mantle night light feature.





Ornamental Arc

HUMPHREY ANTI-VIBRATORS

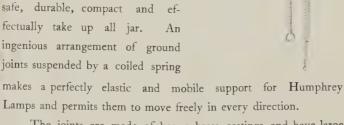
A RE the result of innumerable calls for a device that would take care of the vibration or jar so fatal to the life of mantles in many buildings, especially factories. We were not



Style A

able to find a practical article that did not include in its construction a quantity of rubber hose, the use of which, for this purpose, is forbidden by Insurance Underwriters on account of its great liability to leak from disintegration, rupture or becoming detached, making possible the ignition of the gas by flame from below.

Anti-Vibrators Humphrey are built entirely of metal, are safe, durable, compact and effectually take up all jar. ingenious arrangement of ground



The joints are made of heavy brass castings and have large gas ways. Each Anti-Vibrator is tested under high pressure and only most carefully ground joints pass inspection. The spring is made of the best wire.

Style A. is made in two sizes; with 3/8-inch connections for the indoor lamp and 1/2-inch for outdoor lamp. It permits the adjustment of the spring to take up stretch in the wire should any occur.

In Style B. the elbow brings the ceiling drop and lamp directly in line, this design is made only in the 3/8-inch size for indoor lamps.



Style B



WINDOW LAMP

FOR window lighting, billiard tables and all places where a strong concentrated light is needed we recommend our 18 inch silver glass reflector made in two depths, either 9 inches or 6 inches. When standard lamps are especially ordered for window use we fit them with a 10-inch lower pipe to bring the globe well under the reflector. With cylinder lamps no especial fitting is required.

Full ground or alabaster globes will often be found desirable on lamps over billiard tables where the rays otherwise would be too strong for the players' eyes.

VENTILATING WINDOW LAMP

THIS lamp was originally designed for one of the large metropolitan gas companies to use in enclosed windows. A nickel plated flue pipe should be carried from the lamp out through the top of window enclosure and products of combustion discharged into the main body of the store, where the ventilation is ample to care for it without inconvenience.

As shown, the lamp is supplied with an inverted valve above, the pilot tube being carried down beside the main supply pipe to its usual position. Cords are attached to the operating chains and carried through pulleys in the ceiling to any accessible point. These lamps are also made with the regular valve and lower chains.

In the use of this ventilating lamp the sweating of windows is largely avoided as is also the overheating of goods on display which is sometimes a serious obstacle to the use of gas in small enclosures.



ROLLED RIM CEILING SHADE



WE call attention to our rolled rim ceiling shade which is especially designed for the protection of fine ceilings. It has been tested by some of the best gas appliance men in the country and pronounced highly effective. A small extra charge per lamp is made when equipped with this shade.

HUMPHREY MANTLES

KEENLY appreciating the extreme importance of a firstclass mantle for use with the Humphrey Arc Lamp, we have a mantle

made after our own specifications which we unhesitatingly recommend. Repeated tests, both in laboratory and actual practice, have shown that this mantle is equal to and in many cases better than the highest priced mantle sold for arc lamps. By placing orders for very large quantities we are enabled to get low prices and as the mantles are resold at practically no profit, gas companies can be assured of a higher grade article than the manufacturers themselves can afford to supply at the price we quote. Our only idea in regard to mantles is to insure the use of the best goods as a means of encouraging the use of Humphrey Lamps.

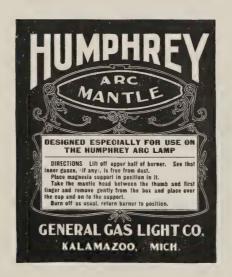
Humphrey Mantles are extra strong, have large heads to readily admit the center support fork, and skirts are special size to fit our burner cap.



HUMPHREY MANTLES

CAUTION:—Many jobbers are selling mantles branded "Humphrey." This use of our name is absolutely unwarranted, and the mantles are usually of an inferior quality. All genuine Humphrey Mantles will hereafter be packed in boxes bearing our own copyrighted label shown below.

Cap Mantles of highest quality for single burner lamps will also be carried in stock and sold under a label of similar design. Our immense purchases of Arc Mantles enable us to secure great concession in price on all mantles, and we take pleasure in sharing same with our patrons.





BOULEVARD LAMP POST

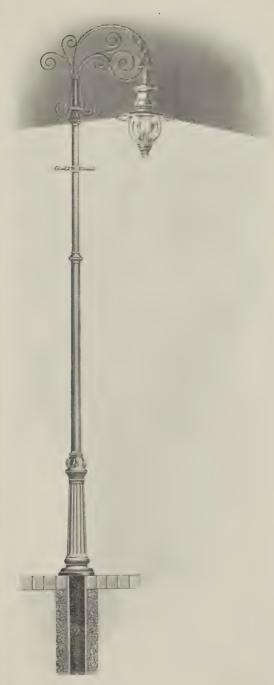
In the remarkable development of outdoor gas lighting which the improved Humphrey Outdoor lamp has made possible, the illumination of store fronts by means of lamps suspended from ornamental posts set at the curb has proved exceedingly popular. We can refer to individual installations of thirty to forty posts used in lighting up corner locations in some of the larger cities. In other cities improvement associations have used this method of drawing attention and trade to their particular locality.

The post we offer is of strong, handsome construction, an ornament to any place. Its dimensions are fully given in the line drawing on the opposite page. The curve top section is fitted with a 3/4 inch gas supply pipe centered within the outer casing so as to be insulated from cold. It does not show in our illustration but is always supplied.

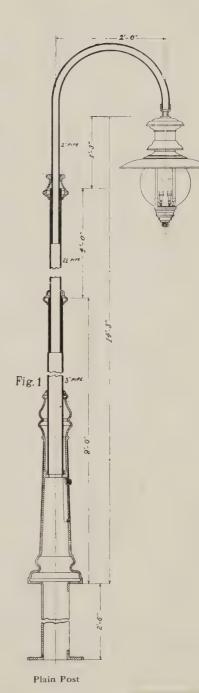
Posts are made either with the ornamental scroll work or with simply a plain curve top. Dimensions are same for both.

The base should be set in concrete, care being taken not to get any inside the post or in contact with the gas service pipe on account of the liability to transmit frost. A flanged base can be furnished for bolting to walks that are excavated beneath.





Ornamental Post



OUTDOOR SIGN



THE sign above illustrated makes an inexpensive and attractive advertisement both day and night. It fits the regular Humphrey Outdoor Lamp, fastening in the same manner and in place of the ordinary reflector shade. The bottom and back toward the store is open and when hung before a window the light is thrown inside showing the goods on display. The illumination of the sign at the same time is complete and effective.

Dimensions—28 inches wide, 22 inches high, 13 inches deep. Glass panels $12\frac{1}{2}$ inches square.

We recommend the purchase of the sign frame only without any glass as this can be easily fitted and lettered by any good sign painter.

When glass is ordered it will be packed separately and with the utmost care, but we cannot guarantee safe delivery and all shipments will be at purchaser's risk.



GLASSWARE

ON the following two pages are shown a variety of Globes and Shades. More detailed description will be given in the separate net price list.

Nine-inch Globes are used on all 3, 4, 5 and 6 burner indoor lamps. We have them in two shapes, round and pear, the latter being favored for cylinder lamps without shades. Clear Globes will pass more light, but Alabaster is preferred by many on account of its power to soften the light without a great deal of diminution in volume.

Eight-inch Globes are used on Standard 2 burner indoor lamps.

Eleven-inch Globes are used on all outdoor lamps.

Nine-inch Bowl Globes are used on Residence Lamps, 10 inch Domes or Reflector shades, and 9-inch Canopies or Ceiling Shades.

Large Ornamental Arcs take 12-inch Bowl Globes, 133/4 inch Domes and 14-inch Ceiling Shades. Domes for both fancy lamps are same shape as the 17-inch Reflector illustrated and Ceiling Shades same as 16-inch Roll Rim Shade.







ITEMIZED PARTS OF HUMPHREY STANDARD INDOOR LAMP

- 1 Main valve or cock body.
- 2 Arm to support burner.
- 212 Needle point screw.
- 3 Nozzle or check.
- 4 Corrugated bunsens.
- 5 Tapered expansion tube.
- 6 Inside wire guaze.
- 61/2 Perforated cone.
- 7 Bunsen head shell. (No. 1 burner.)
- 7½ Bunsen head shell. (No. 2 burner.)
- 8 Burner cap.
- 9 Perforated burner tip.
- 10 Pilot valve body.
- 10½ Pilot tube and tip.
- 11 Casing containing spring for pilot.
- 11½ Set nut and screw.
- 12 Pilot needle valve.
- 121/2 Yoke and support.
- 13 Pilot chain.
- 131/2 Pilot chain spring.
- 14 Main operating chain.

- 14½ Pilot connecting nipple.
- 15 Plug and catch to support globe.
- 16 13-inch lower pipe.
- 17 Corrugated band, upper part of globe.
- Fine thread coupling (center of lamp.)
- 19 Crown band that supports lower shade.
- 20 Globe support.
- 21 9-inch clear glass globe.
- 22 Globe crown band.
- 23 15-inch upper pipe.
- Nickel coupling, fine thread one end, 3/8 standard other end.
- 25 Ceiling plate holder, two pieces.
- 26 16-inch opal ceiling plate.
- 27 17-inch opal reflector.
- 28 Thumb screw to hold glass.





ITEMIZED PARTS OF CYLINDER AND FACTORY LAMPS

PARTS 1 to 15 inclusive of Standard Indoor Lamp are identical on Cylinder and Factory Lamp except that Cylinder Lamp parts are nickel plated. The No. 3, or special factory arc burner, parts 5½ and 8½ will be supplied if wanted; it does not give the same results on all kinds of gas, hence is not regularly furnished.

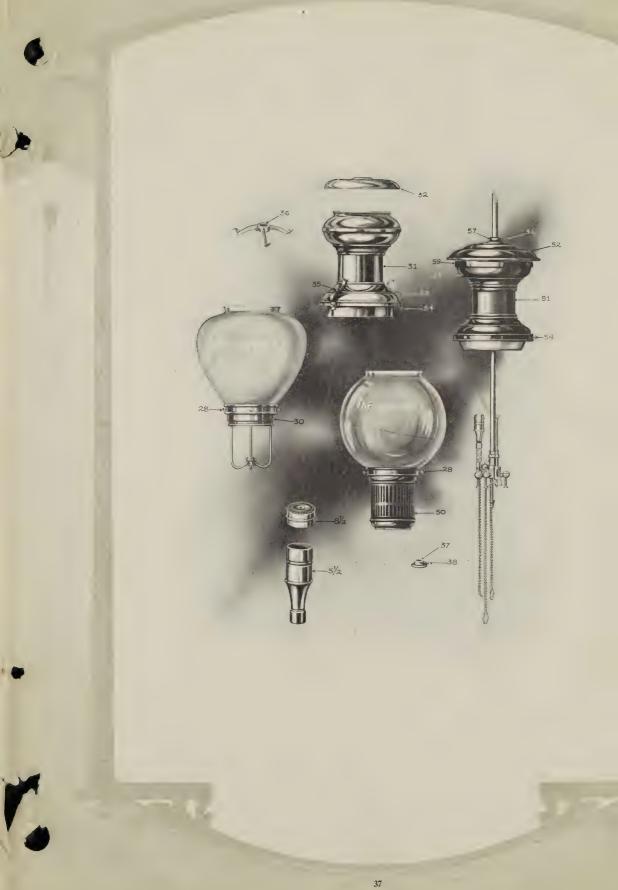
- 5½ No. 3 burner head shell.
- 8½ Sawed burner cap.
- 28 Thumb screw, (nickel on cylinder, copper on-factory lamp.
- 30 Globe holder, cylinder lamp.
- 31 Cylinder.
- 32 6½-inch enameled Canopy.
- 33 Bracket to hold shade.
- Thumb screw to hold shade.
- 35 3-16 stove bolt.
- 36 Malleable spider in cylinder.

- 37 Sliding collar to slip 3/8 gas pipe.
- 38 Set nut in sliding collar.
- 50 Factory lamp globe holder.
- 51 Factory lamp ventilator.
- 52 Factory lamp top.
- 54 Screw to hold shade.
- 57 Set collar for top.
- 59 Brace to hold top.

Lower pipes in cylinder lamps are 10 inches long, upper pipes 9 inches long.

Lower pipes in factory lamps are 10 inches long, upper pipes $10\frac{1}{2}$ inches long.



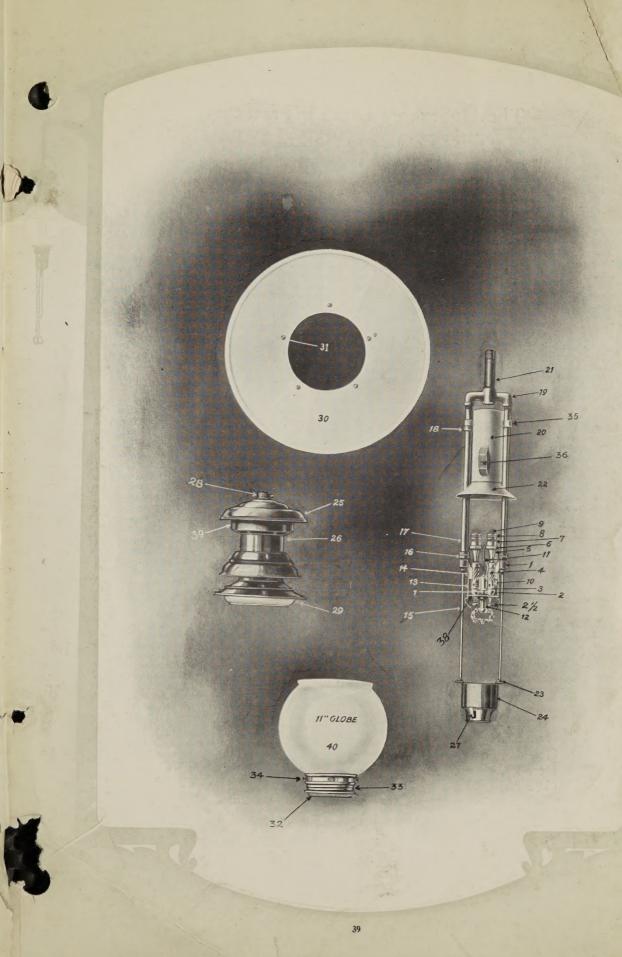


ITEMIZED PARTS OF HUMPHREY OUTDOOR LAMP

- 1 Valve body.
- 2 Arm to support burner.
- 21/2 Needle point screw.
- 3 Nozzle.
- 4 Corrugated bunsen.
- 5 Tapered expansion tube.
- 6 Inside wire gauze
- 7 Bunsen head shell.
- 8 Burner cap.
- 9 Perforated burner tip.
- 10 Pilot adjusting screw.
- 11 Pilot tube.
- 12 Detachable key
- 13 Upper flat steel spring.
- 14 3-16 round head screw.
- 15 5-32 slide rod.
- 16 Union Nut.
- 17 9-16, steel tube, 15 inches long.
- 18 Set collar for chimney.
- 19 Double cast elbow.
- 20 Chimney.
- 21 ½ inch nipple

- 22 Flange on chimney.
- 23 Lock nut for No. 15 rod.
- 24 Globe support holder.
- 25 Top of ventilator.
- 26 Ventilator.
- 27 Lower flat springs.
- 28 ½-inch set collar.
- 29 Asbestos ring.
- 30 Enameled steel shade.
- 31 Screw and nuts for shade.
- 32 Inside shell, globe holder.
- Outside shell, globe holder.
- 34 Thumb screw for globe holder.
- 35 Ear for chimney
- Brace for chimney.
- 37 ¼-inch tube in main pipe to case 5-32 slide rod.
- 38 Wind guard plate.
- 39 Iron strap to hold top.
- 40 11-inch globe.





The Humphrey Lamp is Protected by Patents as Follows.

UNITED STATES PATENTS

01						
Mar. 12, 1901			_		-	No. 34209 Design
Dec. 24, 1901		_		-		35481 Design
Apr. 1, 1902		-			- 1	No. 696640
Jan. 6, 1903	-			-		- 717747
Mar. 10, 1903		_			-	- 722306
May 19, 1903	-	-		_		No. 36332 Design
Sept. 29, 1903		-			-	- 740017
Sept. 29, 1903	~	-		-		- 740018
Nov. 3, 1903		-	_		_	- 742990
Mar. 20, 1904	3 -	-	,	-		No. 36860 Design
Mar. 29, 1904		_	' -		-	36861 Design
June 14, 1904	-	-		_		- 36973 Design
June 14, 1904		_	_		_	36974 Design
June 14, 1904	,.	-		_		- 36975 Design
June 14, 1904		_	_		_	36976 Design
July 11, 1905	_	-	. ,	-		- 794225
Oct. 16, 1906		_	-		-	38288 Design
Nov. 6, 1906	_	_		_		- 834907
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